

Rock Island Arsenal  
Shop D  
(Building 62)  
Rodman Avenue between First Street  
and Second Street  
Rock Island  
Rock Island County  
Illinois

HAER No. IL-20-B

HAER  
ILL,  
81-ROCIL,  
3/62-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record  
National Park Service  
Department of the Interior  
Washington, D.C. 20013-7127

HAER  
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HISTORIC AMERICAN ENGINEERING RECORD

ROCK ISLAND ARSENAL

SHOP D

(Building 62)

HAER No. IL-20B

Location: Rodman Avenue between First Street and Second Street,  
Rock Island Arsenal,  
Rock Island,  
Rock Island County, Illinois  
UTM: 15.704820.4599000  
Quad: Davenport East

Date of Construction: 1871-1875

Present Owner and Occupant: U.S. Army

Present Use: Officers' club, post restaurant, museum,  
administrative offices

Significance: After taking command of Rock Island Arsenal in 1865, General Thomas Jefferson Rodman devised a master plan for the installation calling for the construction of ten large, Creek Revival, manufacturing shops, five on each side of the island's major east-west thoroughfare. Under construction from 1871 to 1875, Shop D was the fourth to be completed. With its companion facilities completed under the Rodman plan, Shop D forms a cohesive architectural statement, which, in terms of both scale and style, has no counterpart among government installations in the Midwest.

In addition to their architectural importance, the Rodman shop buildings are the administrative and technological core of Rock Island Arsenal, one of only two "old-line," nineteenth-century arsenals still in operation for munitions production. The buildings are vital for understanding the history of American ordnance development and manufacture from the Spanish American War to the present. Shop D is part of the Rock Island Arsenal National Register Historic District.

Historian: Jeffrey A. Hess, February 1985

Architectural Historian: David Arbogast, February 1985

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: According to Colonel Daniel Webster Flagler, who succeeded General Thomas Jefferson Rodman as the arsenal's commandant in 1871, the building site was selected by Rodman in February 1866 (Flagler, p. 118). Excavation commenced in May 1871. Because of natural subterranean fissures and a strata of soft clay, "considerable difficulty was encountered in obtaining good foundations. . . . A 'core of beton' was laid, the upper surface being convex, and on the center thus formed an arch of seven consecutive courses was laid, which abutted at either end on solid rock; 270 cubic yards of stone were laid in this hole alone. It was necessary to construct arches in five different places. The foundation for the regular courses was made of stone obtained from a quarry on the island" (Flagler, pp. 320-321). By June 1873, the stonework for the first two stories was nearly completed (Flagler, p. 326). By June 1874, "the walls [were] entirely completed [along with] about one half of the window sash and window frames [and] the iron work for the second and third floors" (Flagler p. 333). Construction concluded in 1875 (Flagler, p. 341). A datestone in the southwest corner of the south elevation bears the inscription, "Begun 1871 Finished 1875."
2. Architect: Although Shop G was designed and built under the supervision of Colonel Daniel Webster Flagler, the building was closely patterned after Shops B and C (see HAER Nos. IL-20A, IL-20G), which were designed by General Thomas Jefferson Rodman (Flagler, p. 261).

Born in Salem, Indiana in 1815, Rodman graduated from West Point in 1841 and was assigned to Allegheny Arsenal in Pittsburgh as an officer of the Ordnance Department. During the next two decades, he developed techniques for hollow casting cannon and for producing perforated propellant, which revolutionized the manufacture and use of artillery (Zabecki, pp. 55-56; Flagler, pp. 262-266).

As commandant of Watertown Arsenal near Boston from 1859 to 1865, Rodman was responsible for designing a machine shop for the installation, which was a simplified, brick version of the Greek Revival stone manufacturing shops he subsequently planned for Rock Island Arsenal (Baylies and Bahr, p. 37). Rodman assumed command of Rock Island Arsenal in 1865; he died of illness at the installation in June 1871 (Flagler, pp. 116, 261).

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3. Original and subsequent owners: U.S. Army.
4. Builder, contractor, suppliers:

Apart from foundation stone, which was quarried on the island, the building's limestone was furnished on a contract basis by W. A. Steel of Joliet, Illinois, at "\$11.85 per actual cubic yard of stone work in the building when completed, excluding all openings and all builder's . . . measurements" (Flagler, p. 286).

Slate roofing was probably put on by Charles C. Hipwell. As a foreman of Aiken & Co. of Pittsburgh, Hipwell had previously slated the roofs of Shops B and C (see HAER Nos. 1L-20A, 1L-20G). In the early 1870s, he established his own business in Davenport, Iowa, and "slated nearly all the buildings erected at the arsenal [before 1877]" (Flagler, p. 257).

The iron roof frame and "house hardware" were manufactured at the arsenal in Shop E (Flagler, p. 341; see HAER No. 1L-20H). Woodwork, including sash and flooring, was manufactured in Shop C (Flagler, p. 341; "History of Rock Island Arsenal," p. 32; see HAER No. 1L-20A). Apart from the copper work, which was put on by an unknown contractor, the remaining construction work was "done by day workmen, employed and paid by the Government. The work was directed and superintended directly by officers of the Ordnance Department stationed at the arsenal, and the necessary engineering work, calculations, making of tests, experiments, etc., was also done by the officers" (Flagler, p. 260, 342).

5. Original plans and construction: On February 7, 1866, Rodman submitted to the War Department a schematic site plan of the arsenal, proposing the construction of ten manufacturing shops, five on each side of the arsenal's main east-west thoroughfare (later named Rodman Avenue). The plan was published in 1877 (Flagler, Plate 1). It delineates the ten buildings, including Shop D, as U-shaped structures with a crossbar connecting the legs of the "U" at midpoint. According to Flagler, the configuration of the buildings was almost immediately changed. "To add strength to the walls [and] beauty to the architecture," two porticos were added to the front and to each of the sides of the buildings. Also, the crossbar between the legs of the "U" was removed "to leave the courtyard clear for teaming purposes" (Flagler, p. 123). The revised plan was published in 1877 (Flagler, Figure 1, inset on Plate 1). No other early plans or elevations have been located.

The basic details of the building's construction is shown in a bird's eye view of the arsenal published in 1877 (Flagler,

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frontispiece). The general accuracy of this view is confirmed by a 1945 photograph in the picture collection of the Rock Island Arsenal Historical Office (see HAER Photo No. IL-20B-7). The same collection also has a photograph, dated "about 1898," which documents the building's original, open, interior plan (see HAER Photo No. IL-20B-6). The building's present configuration conforms to the original construction, except that a three-story, stone-veneer building of identical Greek Revival architecture (Building 61, see HAER No. IL-20Q) now connects the pavilions on Shop D's west facade to Shop B.

6. Alterations and additions: At undetermined dates, the original slate roofing was removed; metal roofing was installed; and the original stone entrance steps were replaced with concrete steps.

In 1917-1918, the facades of the pavilions on the building's west elevation were demolished. The original stonework from the demolished sections was reused in constructing a three-story, stone-veneered, Greek Revival structure connecting the remaining portions of the pavilions to Shop D. The new building, designated as "B-D Connection," was designed and built by Stone and Webster Company of Boston; it was completed in May 1918 (Completion Report, p. 3; see HAER No. IL-20Q).

After 1954, the building's open interior plan was partitioned into office spaces (Pickerel, p. 34).

About 1981, the original limestone cornice and eaves were replaced with a fiberglass material painted tan to simulate the original stonework. The Rock Island Arsenal Historical Office has a 1981 photograph documenting a similar alteration for Shop B. It is captioned on the back "Bldg. 60, looking N., cornice repair, 20 Feb. 81."

B. Historical Context:

After assuming command of Rock Island Arsenal in August 1865, General Thomas Jefferson Rodman devised a master construction plan for the installation, which he submitted to the War Department on February 7, 1866. In its general outline, Rodman's plan called for the construction of ten large, stone, manufacturing shops, five on each side of the arsenal's main east-west thoroughfare (later named Rodman Avenue). The establishments on the south side of the avenue were called "arsenal shops," which meant they were to be devoted to the manufacture of general ordnance items. Those on the north side were called "armory shops," because they were intended for small arms production. All ten shops were designed in a Greek Revival style,

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which Rodman had previously used in designing a machine shop at Watertown Arsenal near Boston. Although none of the shops was completed before Rodman died of illness in June 1871, all ten were eventually finished by his nineteenth-century successors (Flagler, p. 118; Nothstein and Stephens, pp. 153-157).

Situated on the western half of "armory row," Shop D was the fourth shop to be completed. Excavation began in May 1871, and construction concluded in 1875. Although Shop D was intended for the manufacture of small arms, Congress did not appropriate funds for the necessary machinery until the end of the nineteenth century. During this period, Shop D served as a general purpose storehouse (Nothstein and Stephens, p. 209).

In 1899, Congress finally authorized the purchase of small arms manufacturing equipment for Rock Island Arsenal. During the next three years, the three westernmost shops on armory row were equipped to produce 1903 model Springfield rifles (Nothstein and Stephens, pp. 209-210). Shop D was assigned a variety of responsibilities. It primarily contained a machine shop for repairing small arms production equipment; a woodworking department equipped with lathes, profilers, bench saws, and drill presses for shaping and fitting rifle stocks; and a polishing room for finishing metal components. These operations took place on the first two floors (Stanley, pp. 311-312; "General Course of Instruction," pp. 13-14). In the basement there were facilities "for hardening and tempering small tools, machines for cutting off stock, stones for grinding bayonets, etc, and plumbing, pipe-fitting and repair shops" (Stanley, p. 311). The machinery was powered by the arsenal's hydroelectric plant, which was completed in 1901 (see HAER No. IL-20CC).

Small arms production commenced in 1904 and continued until 1913; it resumed in 1916 and terminated again in 1919 (Nothstein and Stephens, pp. 215-218, 232). During World War I, the west wing of the basement was outfitted with chemical vats for darkening and rustproofing rifle components ("General Course of Instruction," pp. 16-20). After 1919, Shop D was used for repairing and reconditioning rifles (Nothstein and Stephens, pp. 341-349).

About 1942, Shop D was cleared of obsolete machinery, and outfitted for assembling machine gun tripods and for reconditioning .50 caliber machine guns. During 1944-1945, the building also housed an engine overhaul operation that had previously been located in Shop B ("History of Artillery Vehicle Department, 1942-1943," p. 26-27; "History of Artillery Vehicle Department, 1944-1945," p. 11). Converted into a storehouse in 1947, Shop D was reactivated for machine gun production from 1949 to 1954 ("History Manufacturing

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Department, 1946-1947" p. 21; "History Manufacturing Department, 1948-1949," p. 33; Pickrel, p. 34). The building was subsequently remodeled into office space and continues in that capacity to the present time. It has been designated as "Building 62" at least since World War II (see HAER Photo No. IL-20B-7). (For further documentation, see HAER No. IL-20.)

Prepared by: Jeffrey A. Hess  
MacDonald and Mack Partnership  
February 1985

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

- I. Architectural character: The building is a massive, late Greek Revival style, U-plan, limestone structure. It is two-and-one-half stories above a basement, with a gabled roof sheltering an attic. It forms part of a symmetrical set of five buildings along the north side of Rodman Avenue, which is mirrored by a matching set on the south side.
2. Condition of fabric: The building is well-maintained and is in good condition.

B. Description of Exterior:

- I. Overall dimensions: The main (south) block (HAER Photo Nos. IL-20B-1 and IL-20B-4) measures 210' x 60' (19 bays on the south elevation and 9 bays on the north elevation). Two wings (HAER Photo Nos. IL-20B-2 and IL-20B-3), each measuring 240' (28 bays on their exterior elevations and 22 bays on their courtyard elevations x 60' (5 bays on their north elevations) stretch north from the east and west ends of the main block. Near each end of the outer, long elevations of the wings are projecting pavilions measuring 60' (5 bays) and extending 15' (1 bay) from the wing elevations. The building is two-and-one-half stories tall with a full basement and attic.
2. Foundations: Coursed, rock-faced ashlar limestone measuring 3'-0" thick below a dressed ashlar limestone water table. The south face of the southwest corner block of the water table contains the inscription, in block lettering, 'BEGUN 1871" "FINISHED 1975".
3. Walls: Coursed, rock-faced ashlar limestone (HAER Photo Nos. IL-20B-1, IL-20B-2, IL-20B-3, and IL-20B-4) decreasing in thickness by 6" with each story. Colossal rock-faced ashlar limestone pilasters (HAER Photo Nos. IL-20B-1, IL-20B-2, IL-20B-3, and IL-20B-

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4) rising from the water table to the entablature divide the elevations into a regular bay system. The dressed limestone entablature (HAER Photo Nos. IL-20B-1, IL-20B-2, IL-20B-3, and IL-20B-4) carries a projecting cornice (originally dressed limestone) of tan fiberglass simulating limestone. The pedimented gable ends (HAER Photo Nos. IL-20B-1, IL-20B-2, and IL-20B-3) are rock-faced ashlar limestone with dressed limestone cornices. There is a carved limestone block above the central entrance of the front (south) facade bearing the date 1871.

4. Structural systems: Limestone bearing wall. Coursed, rock-faced limestone piers 20' on-center in the basement support rivetted, built-up, cast-iron, "Phoenix" columns on the first and second floors. First, second, and attic floor systems are wrought-iron stringers and joists with brick vaulting between. The roof system is iron Fink trusses.
5. Porches: Porches (HAER Photo Nos. IL-20B-1, IL-20B-2, and IL-20B-3) are located at the center bays of the pavilions (except abutting Building 61), the north ends of the wings, the third bays from each end of the south elevation of the main block, and the center of the main block. Typical porches consist of poured concrete steps on rock-faced ashlar limestone base walls.
6. Light wells: Across the south elevation there is a narrow window well (HAER Photo Nos. IL-20B-1) with rock-faced ashlar limestone walls to grade and a black steel pipe railing above grade.
7. Openings:
  - a. Doorways: Principal doorways (HAER Photo Nos. IL-20B-1, IL-20B-2, IL-20B-3, and IL-20B-4) are centered in the northeast, northwest, and southeast pavilions, the wing ends, the third bays from each end of the south elevation, and the first and sixteenth bays from the south end of the courtyard elevations of the wings. Each has a rock-faced limestone segmental-arched head with a rock-faced keystone, and rock-faced limestone jambs with large semi-circular base blocks projecting into the doorway. Most of the original limestone sill blocks have been replaced with poured concrete sills. The south, north, and pavilion doorways contain pairs of modern glass doors with transoms and sidelights in black anodized aluminum framing. The four courtyard doorways have been filled with fixed anodized aluminum window sash similar to that of the other doorways. Narrower doorways (HAER Photo No. IL-20B-1) are located in the center of the south elevation of the main block and in the north basement elevation of the northeast and northwest pavilions. These openings are identical to those of the principal doorways, differing only in width. The center doorway

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of the south elevation contains a fixed sash aluminum window similar to those facing the courtyard. The basement pavilion doorways each contain a pair of modern alab doors with an upper glass panel. In the fifth and seventh bays from the south of the courtyard elevations of the wings are doorways matching the width of standard window openings. They have ashlar limestone jambs and dressed limestone sill and lintel blocks, similar to the adjacent window openings, differing only in length. All four of these doorways are filled with fixed aluminum window sash similar to that used in the other courtyard doorways. In the basement, the southernmost bay of the west wing elevation and the south bay of the northeast pavilion face, which originally contained window sash, now contain four-panel wood doors. At the attic level of the west elevation of the east wing, facing the courtyard a pair of window openings has been removed to accommodate a wood door with a four-light fixed sash over two panels. Although at one time, it may have opened to a fire escape, it is now stopped shut.

- b. Windows: Typical first- and second-floor window openings (HAER Photo Nos. IL-20B-1, IL-20B-2, IL-20B-3, and IL-20B-4) contain six-over-six, double-hung, wood sash, and have rock-faced limestone jambs, cut limestone sills and flat lintels. Paired window openings (HAER Photo Nos. IL-20B-1, IL-20B-2, IL-20B-3, and IL-20B-4) above the primary doorways have segmental-arched, rock-faced limestone voussairs and keystones. Above the narrow, center doorways on the south and north main block elevations are similar window openings (HAER Photo No. IL-20B-1) containing pairs of four-over-four, double-hung, wood sash. Attic window openings (HAER Photo Nos. IL-20B-1, IL-20B-2, IL-20B-3, and IL-20B-4) contain small, single-light, pivoting, wood sash and are typically arranged in pairs of small openings in the building entablature with sets of four centered in the gable ends and sets of three in the centers of the south and north main block elevations. These window openings have rock-faced limestone jambs and sills and lintels formed by the entablature and frieze. The gable ends contain paired window openings (HAER Photo Nos. IL-20B-1, IL-20B-2, and IL-20B-3) with rock-faced limestone jambs, segmental-arched, rock-faced limestone arches and keystones and dressed limestone sills. The basement window openings (HAER Photo Nos. IL-20B-1, IL-20B-2, IL-20B-3, and IL-20B-4) typically contain three-over-three, double-hung, wood sash in rock-faced limestone jambs, lintels formed by the water table, and flat dressed limestone sill blocks. The four second-floor window openings above the narrow courtyard doorways discussed above are filled with black anodized aluminum louvered vents. One window opening in the west elevation of the west wing has been

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enlarged to accommodate a doorway for the bridge leading to Building 63. All wood sash are painted white.

8. Roof:

- a. Shape, covering: The roof (HAER Photo Nos. IL-20B-1, IL-20B-2, IL-20B-3, and IL-20B-4) is a cross-gable form covered with standing seam metal roofing.
- b. Cornice, eaves: The cornice and eaves (HAER Photo Nos. IL-20B-1, IL-20B-2, IL-20B-3, and IL-20B-4) are fiberglass painted tan to simulate the original limestone cornice and eaves. The interior metal gutter system is tied to exterior metal leaders which lead to an underground drainage system.

C. Description of Interior:

1. Floor plans: The building originally contained no interior partitions in keeping with its function as a shop. Partitions were added when it was converted to its present uses after World War II. Most of the partitions date from the past decade. Of the two original freight elevators located at the intersection of the wings with the main block, one survives in a modernized form and the other has been replaced with a passenger elevator. Modern restrooms are typically located in the pavilions of the basement, first, and second floors.
  - a. Basement: The basement is an open plan area with some enclosed rooms, including a weight training room, a recreation room, a classroom, offices, a thrift shop, and a men's locker room.
  - b. First floor: The first floor is essentially an open plan area with a number of enclosed offices. From the west side of the west wing a bridge spans to Building 63.
  - c. Second floor: The second floor is basically an open plan area with a number of enclosed offices.
  - d. Attic: The attic is an open plan area with some enclosed portions.
2. Stairways: There are four U-plan stairways (HAER Photo No. IL-20B-5) with intermediate landings rising from the basement to the attic. These are located in each of the pavilions. Originally open, they are now enclosed. They are cast iron in curvilinear Italianate style forms with open risers and open, decorative railing supports and no newel posts. The landings and treads are covered with modern gray rubber tile flooring. The handrails are dark varnished wood and have iron pipe railings added above them

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to meet modern safety standards. The bottom flights of stairs in the basement are limestone blocks.

3. Flooring: Basement flooring is poured concrete with a sealer applied to it. The first floor has poured concrete flooring covered with linoleum tile. The second floor has wood flooring covered with linoleum tile. The attic has wood flooring with a clear varnish finish. Along the center of the attic floor is a set of steel plates forming a track.
4. Wall and ceiling finishes: Outer basement walls and interior piers are painted rock-faced ashlar limestone. Interior partition walls are painted gypsum board. The ceiling is the exposed and painted iron joists and stringers and brick vaulting.

Outer first-floor walls are painted rock-faced limestone. Offices are enclosed with gypsum board and demountable partition systems. The ceiling is suspended acoustical tile.

The second-floor outer walls (HAER Photo No. IL-20B-5) are painted rock-faced ashlar limestone. Offices are enclosed with painted gypsum board partitions. The ceiling is suspended acoustical tile.

The outer attic walls are unpainted rock-faced ashlar limestone. Interior partition walls are painted, vertical, beaded, tongue-and-groove boards and painted gypsum board. The ceiling is varnished, beaded, tongue-and-groove, board decking on wood rafters and purlins.

5. Openings:

- a. Doorways and doors: Because the interior was originally an open shop there were no original doorways. Thus, all doorways are of relatively recent vintage appropriate to their respective partitions.
- b. Windows: There are no window casings. Window openings (HAER Photo No. IL-20B-5) are formed by the adjacent limestone.

6. Hardware: No known original hardware, other than window sash cords, pulleys, weights, and ornate lifts, is known to survive.

7. Mechanical equipment:

- a. Heating, air conditioning, ventilation: The building is heated by steam radiators from a central heating plant (Building 227). There is no air conditioning. Ventilation is provided by opening the window sash.

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- b. Lighting: Artificial illumination is by means of incandescent electrical fixtures in the attic and fluorescent fixtures in the basement, first, and second floors. No evidence remains of original artificial lighting systems.
- c. Plumbing: No original plumbing fixtures survive.
- d. Elevators: Of the two original freight elevators, one survives in a modernized form and the other has been replaced with a passenger elevator.

D. Site:

1. General setting and orientation: The building is set on the northwest corner of Rodman Avenue, the arsenal's principal street, and Second Street. East of the building is Building 64, an electroplating shop. To the west is Building 60, housing post restaurants, a museum, and an officers' club. Connecting the two buildings is Building 61, a credit union. North of Building 61 and immediately west of the west wing is Building 63, a workshop, which is connected by its own enclosed bridge to the building. The interior courtyard is paved. In its north end is a large air-conditioning unit, labelled as structure 73. North of the building runs North Avenue. The relatively level site slopes gently to the north.
2. Outbuildings: Building 63, a workshop, is set in the southeast corner of the courtyard north of Building 61 and is connected to the west elevation of the west wing of this building via an enclosed bridge. It is a typical World War II temporary building. The rectangular building has a low gable roof with a large shed-roofed monitor in its center. Both roofs are covered with asphalt roll roofing. The monitor roof has two round sheet metal ventilators. The east and west eaves carry semi-circular metal gutters with leaders at each corner tying to the underground drainage system. Tall poured concrete foundations raise the floor to the same level as that of the adjacent buildings. The walls are covered with wood shiplap siding painted tan. At the west end of the north elevation is the only doorway. It contains a pair of four-light over single vertical board panel doors in a plain wood casing. Fronting the doorway is a poured concrete porch and precast concrete steps with a steel railing. Typical window openings have plain wood casings similar to the door. Sash in the lower window openings are eight-over-eight, double-hung wood and in the monitor they are eight-light, fixed wood. There are five pairs of sash in the east elevation, four pairs in the west elevation of which three sash are now missing, six sash in the south elevation and four sash in the north elevation. The monitor has three pairs of

sash in its east and west elevations. The building is in deteriorated condition, apparently having been abandoned.

Prepared by: David Arbogast  
Architectural Conservator  
February 1985

### PART III. SOURCES OF INFORMATION

#### A. Original Architectural Drawings:

No original architectural drawings of the original construction or of major alterations have been located. But a schematic drawing of the building's original configuration was published in 1877 (Flagler, Figure 1, inset on Plate I).

#### B. Early Views:

A bird's-eye view of the arsenal showing the basic details of Shop D's construction was published in 1877 (Flagler, frontispiece). The picture collection of the Rock Island Arsenal Historical Office has a photograph showing the building's original, interior, open plan. It is captioned on the back, "Shop D, Bldg 62, 1st Floor / About 1898," (see HAER Photo No. IL-20B-6).

#### C. Bibliography:

##### 1. Primary and unpublished sources:

Baylies, Libby and Bahr, Betsy. "Historic American Buildings Survey of the United States Materials and Mechanics Research Center, Watertown, Massachusetts." 1982. Haer No. MA-20, HABS/HAER Collection, Prints and Photographs Division, Library of Congress. Discusses Rodman's architectural work at Watertown Arsenal.

"General Course of Instruction." 1918. Rock Island Arsenal Historical Office. Briefly describes woodworking, "blueing," and rustproofing operations during World War I.

Hess, Jeffrey A., and Mack, Robert C. "Historic Properties Report Rock Island Arsenal, Rock Island, Illinois". Prepared by MacDonald and Mack Partnership, and Building Technology Incorporated for the Historic American Buildings Survey/Historic American Engineering Record, National Park Service, U.S. Department of the Interior, 1985. The report,

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with accompanying inventory cards, is filed as field records in the Prints and Photographs Division, Library of Congress, under HAER No. IL-20.

"History Artillery Vehicle Department, 1942-1943," vol. 4. Rock Island Arsenal Historical Office. Briefly describes building's manufacturing program.

"History Artillery Vehicle Department, 1944-1945," vol. 5. Rock Island Arsenal Historical Office. Briefly describes building's manufacturing program.

"History Manufacturing Department Rock Island Arsenal, 1946-1947," vol. 6. Rock Island Arsenal Historical Office. Briefly describes building's conversion to storehouse.

"History Manufacturing Department Rock Island Arsenal, 1948-1949," vol. 10. Rock Island Arsenal Historical Office. Notes reactivation of building's small arms manufacturing program.

"History of Rock Island Arsenal Called for by O.O. 25301-D-195," N.d. Rock Island Arsenal Historical Office. Notes role of arsenal shops in manufacturing building materials for Shop D.

Pickerel, Donald K. "History of the Manufacturing Plant of the Rock Island Arsenal," vol. 15. Rock Island Arsenal Historical Office. Notes suspension of building's small arms manufacturing program.

Real Property Cards, Engineering Plans and Services, Rock Island Arsenal. Briefly describes building's structural characteristics and provides sketchy history of maintenance operations.

2. Secondary and published sources:

Completion Report Covering All Construction Projects Accomplished Under Supervision of the Construction Division, U.S. Army at Rock Island Arsenal. Rock Island Arsenal, 1919. Rock Island Arsenal Historical Office. Discusses planning and construction of connecting building between Shops B and D.

Flagler, D[aniel] W[ebster]. A History of the Rock Island Arsenal from Its Establishment in 1863 to December 1876. Washington, D.C.: Government Printing Office, 1877. The most

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detailed account of the building's construction, written by the arsenal's commandant from 1871 to 1886.

Nothstein, Ira O. and Stephens, Clifford W. A History of Rock Island Arsenal from Earliest Times to 1954. Rock Island: U.S. Army, Rock Island Arsenal, 1965. 3 vols. Rock Island Arsenal. The best account of the arsenal's general operations, with specific references to Shop B's manufacturing functions.  
Stanley, F. A. "The United States Arsenal at Rock Island, -- Vl." American Machinist (March 9, 1905), 311-313). Detailed discussion of small arms production operation.

Zabecki, David T. "Father of the Rock Island Arsenal." Field Artillery Journal, 49 (January / February, 1951), 55-56. Discusses Rodman's pioneering work in cannon and propellant design.

D. Likely Sources Not Yet Investigated:

Record Group 156 at the National Archives contains correspondence on the construction and operation of Rock Island Arsenal from 1871 to 1903. This material is also available on 216 reels of microfilm at the Browning Museum, Rock Island Arsenal.

PART IV. PROJECT INFORMATION

This project was part of a program initiated through a memorandum of agreement between the National Park Service and the U.S. Department of the Army. Stanley J. Fried, Chief, Real Estate Branch of Headquarters DARCOM, and Dr. Robert J. Kapsch, Chief of the Historic American Buildings Survey/Historic American Engineering Record, were program directors. Sally Kress Tompkins of HABS/HAER was program manager, and Robie S. Lange of HABS/HAER was project manager. Building Technology Incorporated, Silver Spring, Maryland, under the direction of William A. Brenner, acted as primary contractor, and MacDonald and Mack Partnership, Minneapolis, was a major subcontractor. The project included a survey of historic properties at Rock Island Arsenal, as well as preparation of an historic properties report and HABS/HAER documentation for 38 buildings. The survey, report, and documentation were completed by Jeffrey A. Hess, historian, Minneapolis; Barbara E. Hightower, historian, Minneapolis; David Arbogast, architectural historian, Iowa City, Iowa; and Robert C. Mack, architect, Minneapolis. The photographs were taken by Robert A. Ryan, J Ceronie, and Bruce A. Harms of Dennett, Muessig, Ryan, and Associates, Ltd., Iowa City, Iowa. Drawings were produced by John Palmer Low, Minneapolis.